

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
a collection of information unless it displays a valid OMB control number.

**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.**

Substitute for form 1449A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

She

of

1

**Complete if Known**

Complete if Known	
Application Number	10/698,318
Filing Date	10/31/2003
First Named Inventor	Jon Irvin Stuckey
Art Unit	2856
Examiner Name	
Attorney Docket	P2073US2A

**U.S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

**Examiner Signature**

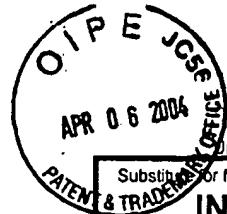
*F. Gualdi*

**Date Considered**

2/6/2007

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



#### Under the Paperw

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(use as many sheets as necessary)*

Sheet 1 of 4

Substitution or form 1449A/PTO <i>&amp; TRADEMARKS</i>		Complete If Known		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		Application Number	10/698,318	
		Filing Date	10/31/2003	
		First Named Inventor	Jon Irvin Stuckey	
		Art Unit	2856	
		Examiner Name		
Sheet	1	of	4	
			Attorney Docket	P02073US2A

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
KCS	1	US-1,956,011	04-24-1934	R.D. Evans	
	2	US-2,124,821	03-30-1936	G. Hubach	
	3	US-2,808,867	10-08-1957	F.E. Buddenhagen et al.	
	4	US-2,878,852	03-24-1959	S. Lippmann et al.	
	5	US-3,023,798	03-06-1962	C.O. Moore et al.	
	6	US-3,861,436	01-21-1975	Poque	
	7	US-3,926,238	12-16-1975	Vorih	
	8	US-3,951,191	04-20-1976	Suzuki et al.	
	9	US-3,998,256	12-21-1976	Verdier	
	10	US-4,178,199	12-11-1979	Lippman et al.	
	11	US-4,327,792	05-04-1982	Landers	
	12	US-4,442,499	04-10-1984	Sekula et al.	
	13	US-4,474,223	10-02-1984	Landers	
	14	US-4,503,898	03-12-1985	Hitzky	
	15	US-4,721,141	01-26-1988	Collette et al.	
	16	US-4,784,200	11-15-1988	Fujiwara	
	17	US-4,785,861	11-22-1988	Fujiwara	
	18	US-4,785,862	11-22-1988	Konishi et al.	
	19	US-4,788,651	11-29-1988	Parker et al.	
	20	US-4,798,236	01-17-1989	Fujiwara	

## **FOREIGN PATENT DOCUMENTS**

**Examiner Signature**

P. Guillo

**Date Considered**

2/6/2007

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP § 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3.). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if applicable to the document.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(use as many sheets as necessary)*

Sheet 2 of 4

Substitute for form 1449A/PTO				Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	10/698,318
(use as many sheets as necessary)				Filing Date	10/31/2003
				First Named Inventor	Jon Irvin Stuckey
				Art Unit	2856
				Examiner Name	
Sheet	2	of	4	Attorney Docket	P02073US2A

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	21	US-4,823,853	04-25-1989	Hitzky	
	22	US-4,936,364	06-26-1990	Kajiwara et al.	
	23	US-5,027,875	07-02-1991	Kogure	
	24	US-5,062,461	11-05-1991	Noguchi	
	25	US-5,125,444	06-30-1992	Yoshida	
	26	US-5,209,793	05-11-1993	Cusimano, II	
	27	US-5,223,059	06-29-1993	Himuro	
	28	US-5,223,065	06-29-1993	Kogure	
	29	US-5,240,053	08-31-1993	Baumhofer et al.	
	30	US-5,240,054	08-31-1993	Kogure	
	31	US-5,269,357	12-14-1993	Killian	
	32	US-5,295,087	03-15-1994	Yoshida et al.	
	33	US-5,314,551	05-24-1994	Williams	
	34	US-5,327,952	07-12-1994	Glover et al.	
	35	US-5,353,855	10-11-1994	Kajiwara et al.	
	36	US-5,358,022	10-25-1994	Glover et al.	
	37	US-5,363,895	11-15-1994	Wells et al.	
	38	US-5,365,987	11-22-1994	Ishii et al.	
	39	US-5,371,685	12-06-1994	Bandel et al.	
	40	US-5,373,882	12-20-1994	Nakagawa	

## **FOREIGN PATENT DOCUMENTS**

**Examiner Signature**

J. Guld

### Date Considered

2/6/2007

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18, if possible. <sup>6</sup> Applicant is to place a checkmark in the box if the application is being filed under 35 U.S.C. § 119(e) or 35 U.S.C. § 120.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450.

**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.**

**Substitute for form 1448AVPTQ**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 4

Substitute for form 1449A/PTO		Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Application Number</b>	10/698,318
(use as many sheets as necessary)		<b>Filing Date</b>	10/31/2003
		<b>First Named Inventor</b>	Jon Irvin Stuckey
		<b>Art Unit</b>	2856
		<b>Examiner Name</b>	
<b>Sheet</b>	3	<b>of</b>	4
		<b>Attorney Docket</b>	P02073US2A

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
RG	41	US-5,383,506	01-24-1995	Kogure	
	42	US-5,617,341	04-01-1997	Nakajima	
	43	US-5,658,409	08-19-1997	Kakumu	
	44	US-5,690,760	11-25-1997	Brown, Jr.	
	45	US-5,714,021	02-03-1998	Ochi	
	46	US-5,717,613	02-10-1998	Nakajima	
	47	US-5,733,393	03-31-1998	Hubbell et al.	
	48	US-5,743,974	04-28-1998	Wesolowski	
	49	US-5,753,057	05-19-1998	Wesolowski	
	50	US-5,759,310	06-02-1998	Wesolowski	
	51	US-5,759,312	06-02-1998	Wesolowski	
	52	US-5,865,921	02-02-1999	Zakelj et al.	
	53	US-5,974,872	11-02-1999	Morishita et al.	
	54	US-5,996,660	12-07-1999	Kakumu et al.	
	55	US-6,109,318	08-29-2000	Yukawa	
	56	US-6,112,167	08-29-2000	Zakelj	
	57	US-6,161,431	12-19-2000	Drahne et al.	
	58	US-6,216,757	04-17-2001	Ohara et al.	
	59	US-6,321,180	11-20-2001	Hubbell, Jr.	
	60	US-6,363,984	04-02-2002	Morgan	

## **FOREIGN PATENT DOCUMENTS**

**Examiner Signature**

R. G. W.

**Date Considered**

2/6/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 891.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16, if applicable. Add zeros to elements.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES  
OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450

**U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE**

Substitute for form 1449A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

She

— 1 —

4

**Complete if Known**

Application Number	10/698,318
Filing Date	10/31/2003
First Named Inventor	Jon Irvin Stuckey
Art Unit	2856
Examiner Name	
Attorney Docket	P02073US2A

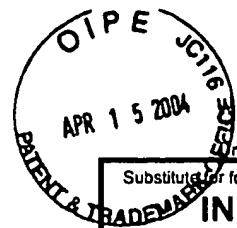
## **U.S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

Examiner Signature R. Guillo Date Considered 2/6/2007

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. **Include copy of this form with next communication to applicant.**

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
<b>Application Number</b>	10/698,318
<b>Filing Date</b>	10/31/2003
<b>First Named Inventor</b>	Jon Irvin Stuckey
<b>Art Unit</b>	2856
<b>Examiner Name</b>	
<b>Attorney Docket</b>	P02073US2A

## **U.S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

**Examiner Signature**

---

2 Guelo

**Date Considered**

2/6/2007

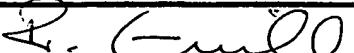
**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. <sup>6</sup> Applicant is to place a copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450.

Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete If Known</b>	
				Application Number	10/698,318
				Filing Date	10/31/2003
				First Named Inventor	Jon Irvin Stuckey
				Group Art Unit	2856
				Examiner Name	
Sheet	2	of	2	Attorney Docket	P02073US2A

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cita No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
	20	THOMAS A. WILLIAMS; Tire Tread Pattern Noise Reduction Through The Application Of Pitch Sequencing, date unknown; pages 955-959			
RG	21	Honeywell Saicor Signals, "Correlation and Probability Analysis" by Dr. I.M. Langenthal, Apro. 1970			
RG	22	"The Hilbert Transform and Application to Correlation Measurements" by J. R. Underbrink, ACS 516, Dec., 1992			
RG	23	"Tyre Noise Simulation at Computer" by F.N. Mambretti dated 1988, pages 175-182			
	24	John J. Benedetto and Michael W. Frazier; Wavelets: Mathematics and Applications; date unknown, pages 2-13			
RG	25	Brian G. Ferguson and Barry G. Quinn; Application of the short-time Fourier transform and the Wigner-Ville distribution to the acoustic localization of aircraft; Aug. 1994; pages 821-827			
RG	26	R.C. Mellin and G. Sovran; Controlling the Tonal Characteristics of the Aerodynamic Noise Generated by Fan Rotors; Mar. 1970; pages 143-154			

Examiner Signature		Date Considered	2/6/2004
--------------------	---	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450.